

Claims

We claim:

1. Air-conditioning system for a motor vehicle having a first coolant circuit which comprises an electrically driven compressor, a condenser, an expansion valve and a latent cold holdover, from which heat is extracted by the coolant circuit, and an air cooling mechanism which extracts heat from the air and feeds the heat to the latent cold holdover.
2. Air-conditioning system according to Claim 1, wherein the air cooling mechanism comprises a second coolant circuit which comprises a pump, the latent cold holdover and a heat exchanger, via which heat is extracted from the air and is then fed to the latent cold holdover.
3. Air-conditioning system according to Claim 2, wherein a blower passes the air stream through the heat exchanger and which simultaneously passes the air stream through heating element is assigned to the heat exchanger.
4. Air-conditioning system according to Claim 3, wherein the heating element is a heating heat exchanger through which a fluid flows which can be heated by a fuel heater.
5. Air-conditioning system according to Claim 1, wherein the latent cold holdover is arranged such that the air to be cooled flows through the latent cold holdover and is cooled in the process.
6. Air-conditioning system according Claim 5, wherein the first coolant circuit comprises a plurality of latent cold holdovers.
7. Air-conditioning system according to Claim 1, further comprising a generator which is driven by a drive shaft of a drive of the motor vehicle.
8. Air-conditioning system according to Claim 7, wherein the air cooling mechanism comprises a second coolant circuit which comprises a pump, the latent cold holdover and a heat exchanger, via which heat is extracted from the air and is then fed to the latent cold holdover.
9. Air-conditioning system according to Claim 8, wherein a blower passes the air stream through the heat exchanger and which simultaneously passes the air stream

through heating element is assigned to the heat exchanger.

10. Air-conditioning system according to Claim 9, wherein the heating element is a heating heat exchanger through which a fluid flows which can be heated by a fuel heater.

11. Air-conditioning system according to Claim 7, wherein the latent cold holdover is arranged such that the air to be cooled flows through the latent cold holdover and is cooled in the process.

12. Air-conditioning system according Claim 11, wherein the first coolant circuit comprises a plurality of latent cold holdovers.

13. Air-conditioning system for a motor vehicle having  
a first coolant circuit which comprises

an electrically driven compressor,

a condenser,

an expansion valve,

a plurality of latent cold holdovers, from which heat is extracted by the coolant circuit, and

an air cooling mechanism which extracts heat from the air and feeds the heat to the latent cold holdovers,

wherein the air cooling mechanism comprises a second coolant circuit which comprises a pump, at least one latent cold holdover, a heat exchanger and a blower, and wherein the blower passes an air stream through the heat exchanger.